

Work Order ID 102345

102345

Page 1

May-30-13 7:18:32 AM

Item ID: 646.3812

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Gusset Bracket

Start Date: 5/27/13 Start Qty: 1.00 *1*

Cust Item ID:

Required Date: 5/27/13 Req'd Qty: 1.00 *1*

Customer:

Reference:

Approvals:	Process Plan:	M.L.S.	Date: 13-05-30	Tooling:	Date:	Run	Start	*NR1*
	QC:		Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
110		0.00							
110	HAAS CNC VERTICAL MACHINING #1								
HAAS 1	Memo	0.00							
HAAS CNC vertical machine #1	1-Machine per DWG DWG REV: _____								
	2- deburr and break all sharp edges								
115	QC2- Inspect parts off machine FAI/FAIB	0.00							
115	Memo	0.00							
QC									
Quality Control									

MSP 13/09/13

1 0

MSP 13/09/13

1 0

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____	DISPOSITION			AGAINST DEPARTMENT/PROCESS				
Part No. _____	Rework <input type="checkbox"/>	Scrap <input type="checkbox"/>	Use-as-is <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	
NCR No. _____	Suspected Unapproved <input type="checkbox"/>	Machining <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Finishing <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>	
		Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Supplier <input type="checkbox"/>	Other <input type="checkbox"/>	Other <input type="checkbox"/>	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General			
Bending	Bend <input type="checkbox"/>	Folio/Program <input type="checkbox"/>	Outside Dimensions <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/>
Centre Not Concentric	BOM/Route <input type="checkbox"/>	Grain <input type="checkbox"/>	Over/Under tolerance <input type="checkbox"/>	Set-up <input type="checkbox"/>
Cracks	Broken/Damage/Defect <input type="checkbox"/>	Hardware <input type="checkbox"/>	Part Incorrect <input type="checkbox"/>	Temperature/Cure <input type="checkbox"/>
Crimp/Kink/Ripple/Wave	Burrs <input type="checkbox"/>	Inspection Incomplete/Unqualified <input type="checkbox"/>	Part Lost/Missing <input type="checkbox"/>	Weld <input type="checkbox"/>
Cuffs	Contamination <input type="checkbox"/>	Instructions Incomplete/Unclear <input type="checkbox"/>	Part Moved <input type="checkbox"/>	Wrong Stock Pulled <input type="checkbox"/>
Crushing	Countersink <input type="checkbox"/>	Misaligned/off center <input type="checkbox"/>	Positioned Wrong <input type="checkbox"/>	
Heat Treat	Cut Too Short <input type="checkbox"/>	Mislabeled <input type="checkbox"/>	Power Loss/Surge <input type="checkbox"/>	Other <input type="checkbox"/>
Inspection Strip in Tube	Drawing <input type="checkbox"/>	Misread <input type="checkbox"/>		
Marks/Chatter	Drill Holes <input type="checkbox"/>	Off-set <input type="checkbox"/>		
Turning Sequence	Finish <input type="checkbox"/>	Out of Calibration <input type="checkbox"/>		
Wave/Twist in Tube	Fit/Function <input type="checkbox"/>	Out of Sequence <input type="checkbox"/>		

DQA: _____

Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____

Date: _____

Work Order update only

Work Order: Part No. NCR No.	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
	Rework Scrap Use-as-is Suspected Unapproved	Skid-tube Machining Thermoforming Large Fab	Crosstube Small Fab Finishing Composite	Water Jet Prod. Eng. Coor. Rec/Store/Packaging Supplier	Engineering Quality Other				

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General			
Bending	Bend			
Centre Not Concentric	BOM/Route			
Cracks	Broken/Damage/Defect			
Crimp/Kink/Ripple/Wave	Burrs			
Cuffs	Contamination			
Crushing	Countersink			
Heat Treat	Cut Too Short			
Inspection Strip in Tube	Drawing			
Marks/Chatter	Drill Holes			
Turning Sequence	Finish			
Wave/Twist in Tube	Fit/Function			

Work Order ID 102345

102345

Page 3

May-30-13 7:18:32 AM

Item ID: 646.3812

Accept

N900040100

Setup

Start

NS1

Revision ID:

Item Name: Gusset Bracket

Stop

NS2

Start Date: 5/27/13 Start Qty: 1.00

1

Cust Item ID:

Required Date: 5/27/13 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan:

Date: Tooling: Date:

Run

Start

NR1

QC:

Date: SPC (Y/N): Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

155

155

QC

Quality Control

QC5- Inspect part completeness to step on W/O

0.00 27
9-89

0.00 13.8.30

180

Identify as per dwg & Stock Location: 81535 0.00

180

Packaging

Packaging

Memo

0.00

IDENTIFY AS PER APICAL MPP-120 BY STAMPING P# AND REV

fx

B8-30

190

QC21- Final Inspection - Work Order Release 0.00

190

QC

Quality Control

Memo

0.00

13/9/30

C 2/3/08/30

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only

Work Order:	Part No.:	NCR No.:	DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework	Scrap	Use-as-is	Skid-tube	Crosstube	Water Jet	Engineering	Prod. Eng. Coor.	Rec/Store/Packaging
			Suspected Unapproved			Thermoforming	Small Fab	Large Fab	Quality	Supplier	Other

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

FAULT CATEGORY

Landing Gear	General	General	General	General	General
Bending	Bend	Folio/Program	Outside Dimensions	Pressure/Forced	
Centre Not Concentric	BOM/Route	Grain	Over/Under tolerance	Set-up	
Cracks	Broken/Damage/Defect	Hardware	Part Incorrect	Temperature/Cure	
Crimp/Kink/Ripple/Wave	Burrs	Inspection Incomplete/Unqualified	Part Lost/Missing	Weld	
Cuffs	Contamination	Instructions Incomplete/Unclear	Part Moved	Wrong Stock Pulled	
Crushing	Countersink	Misaligned/off center	Positioned Wrong		
Heat Treat	Cut Too Short	Mislabeled	Power Loss/Surge		
Inspection Strip in Tube	Drawing	Misread			
Marks/Chatter	Drill Holes	Off-set			
Turning Sequence	Finish	Out of Calibration			
Wave/Twist in Tube	Fit/Function	Out of Sequence			

Picklist Print

May-28-13 8:42:21 AM

Page 1

Work Order ID: 102345

Parent Item: 646.3812

Parent Item Name: Gusset Bracket

Start Date: 5/27/13

Required Date: 5/27/13

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A NEW ISSUE 12-10-22 JLM VERIFIED:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M7075T6A0.75X0.75X0. 060X0.060		Purchased	No			f		0.0000		0.1052632			

7075T6 ANGLE .75" X .75" X .060" X .062"W

~~M7075T6A0.75X0.75X0.060X0.060~~

m7075T6 40.75X 0.75 0.060 X 0.062 ✓
CJ

1123947
~~1126166~~ → 0,166
13/08/13

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

QA Closed: Date:

Work Order: _____				DISPOSITION		AGAINST DEPARTMENT/PROCESS					
				Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>			
				Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>			
				Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>			
				Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>				
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector	
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
<input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube				<input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio							
				<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions							
				<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge							
				<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled							
				<input type="checkbox"/> Other							

APICAL INDUSTRIES, INC.	ENGINEERING CHANGE NOTICE NO. 03697				SHEET 1 OF 1	
	DWG NO. 646.3800	REV: N/C	PREPARED BY B. PETERS	DATE: 11/14/12	EFFECT ON DWG <input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC.	
DWG TITLE: BRACKETS						
APPROVED BY:	ENGR <i>[Signature]</i>	MFG <i>[Signature]</i>	QC <i>[Signature]</i>	EFF: NEXT ORDER		
TRANSACTION CODES (TC) A-ADD C-CREATE R-REVISE D-DELETE	REASON: ADDED ALTERNATE MATERIAL.				ECR:	D-12-006

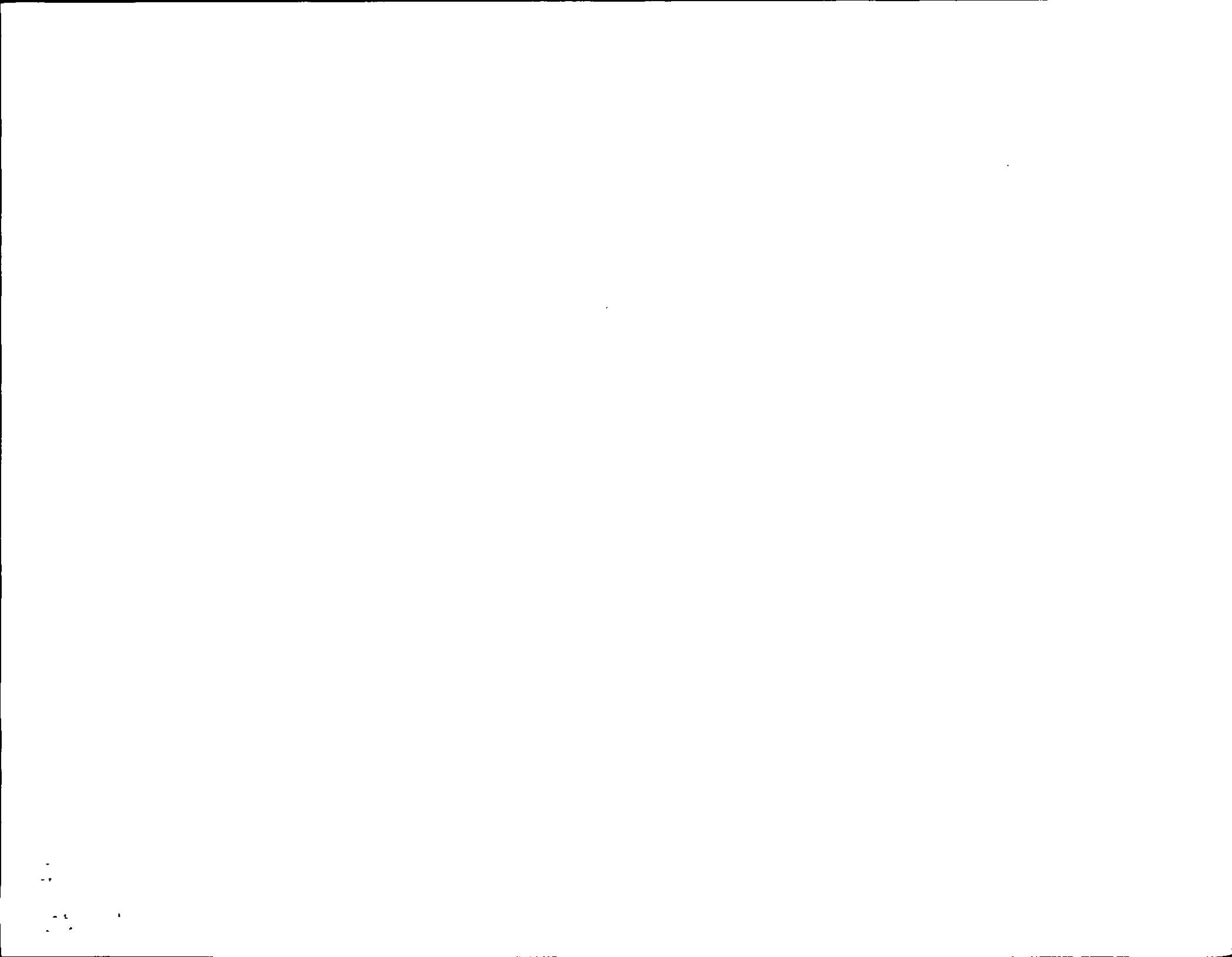
IS

PRIMARY MATERIAL: 7075-T651 ALUMINUM PER AMS-QQ-A-250/12.
ALTERNATE MATERIAL: 7075-T6511 ALUMINUM PER AMS-QQ-A-200/11.

SHEET 1, ZONE A2 IS:

102345.MLJ
13-05-30

F/N	TC	PART NUMBER	QTY	DESCRIPTION	MATERIAL	SPECIFICATION
DOCUMENTS EFFECTED:				<input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM	<input type="checkbox"/> CHANGE CATEGORY <input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR	DER REVIEW REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO



102345

NC171

1. MATERIAL: ALUMINUM 7075 T651 AMS QQ-A-200-12

2. FINISH: HARD ANODIZE ALUMINUM MIL-A-8625 Y1
CLASS 2, COLOR BLACK
CARDINAL 4860-S9 PRETREATMENT PRIMER
PRIME ALUMINUM 233//1 TYPE I CLASS N

3. DEBURR AND BREAK ALL SHARP EDGES

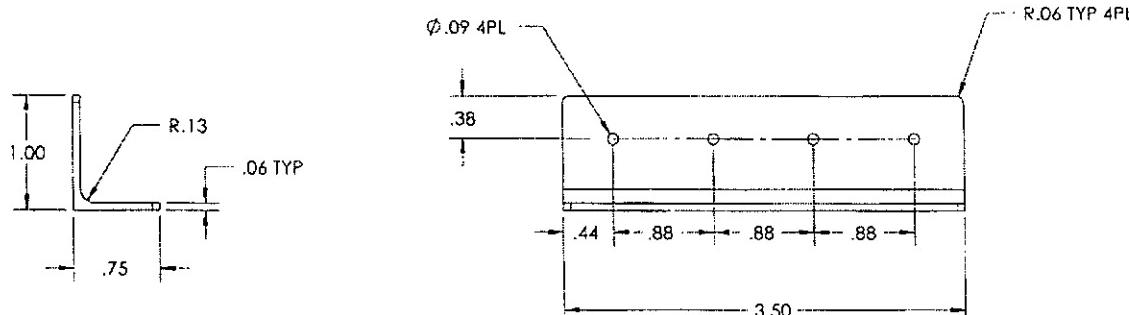
4. IDENTIFY ALUMINUM 7075 T651

B

C

D

646.3810



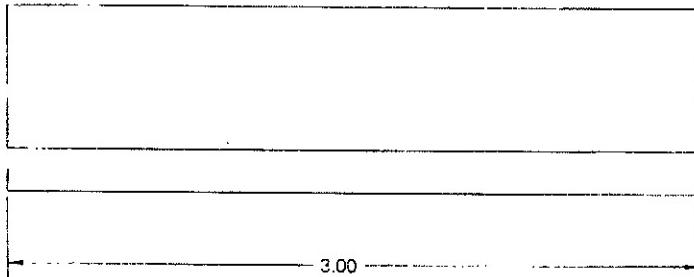
UNINCORPORATED AREA

03647

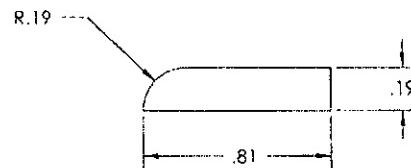
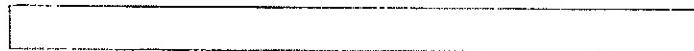
QTY	COMPONENT #	PART #	DESCRIPTION	PARTS LIST	
				MANUFACTURER	SPC.
1	446.3614	WIRE BRACKET			
1	446.3613	STAINLESS BRACKET			
1	446.3612	CUSHION BRACKET			
1	446.3611	RADIUS BLOCK			
1	446.3310	BRACKET			
GUY LINE #				PARTS LIST	
NEWL ASSY (S)				APICAL INDUSTRIES	
COMPONENT #				2608 TEMPLE HEIGHTS DR. OCEANSIDE CA. 92052-3512 (760)724-5920	
1	446.4000	BRACKET ASSEMBLY	80	BRACKETS	
MANUFACTURER				10 CIRCLES DIA. 1/8 10 OVALS DIA. 1/8 X 1/4 10 CIRCLES DIA. 1/8 X 1/4 10 CIRCLES DIA. 1/8 X 1/4 10 CIRCLES DIA. 1/8 X 1/4	
ITEM NUMBER				SCALE: NONE	
COMPONENT #				646.3800	
MANUFACTURER				N/C	
ITEM NUMBER				1 SHEET 1 OF 5	
COMPONENT #					
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102745



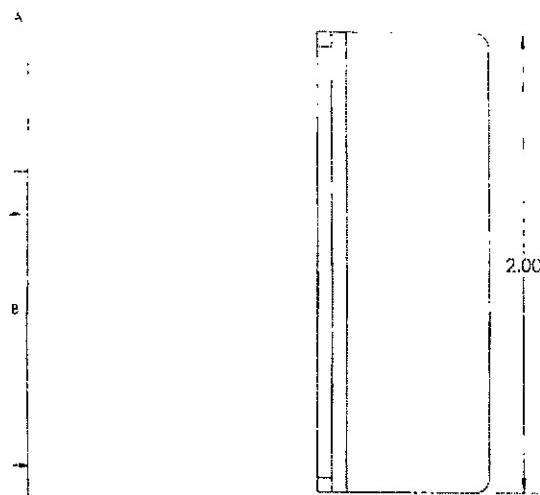
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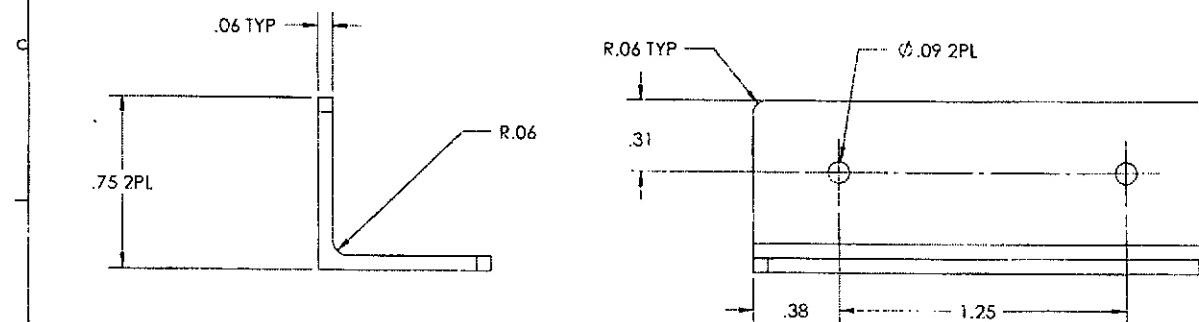
NEXT ASSY IS:	OPENED-DAY	09-19-08	APICAL INDUSTRIES
	DEPARTURE	RECEIVED	
SPRING 2008	SPRING 2008	2600 TEMPLE HEIGHTS DR.	OCEANSIDE, CA. 92056-3512 (750)724-5300
2008/04/24	2008/04/24	BRACKETS	
DATA SHEET NUMBER	DATA SHEET NUMBER	646.3800	N/C
DIMENSIONS IN INCHES	DIMENSIONS IN INCHES	REV. B	07M25
STOCK NUMBER 1010	STOCK NUMBER 1010	SCALE 1:100	SHEET 2 OF 3
STOCK NUMBER 1010	STOCK NUMBER 1010		
STOCK NUMBER 1010	STOCK NUMBER 1010		



102345



646.3812

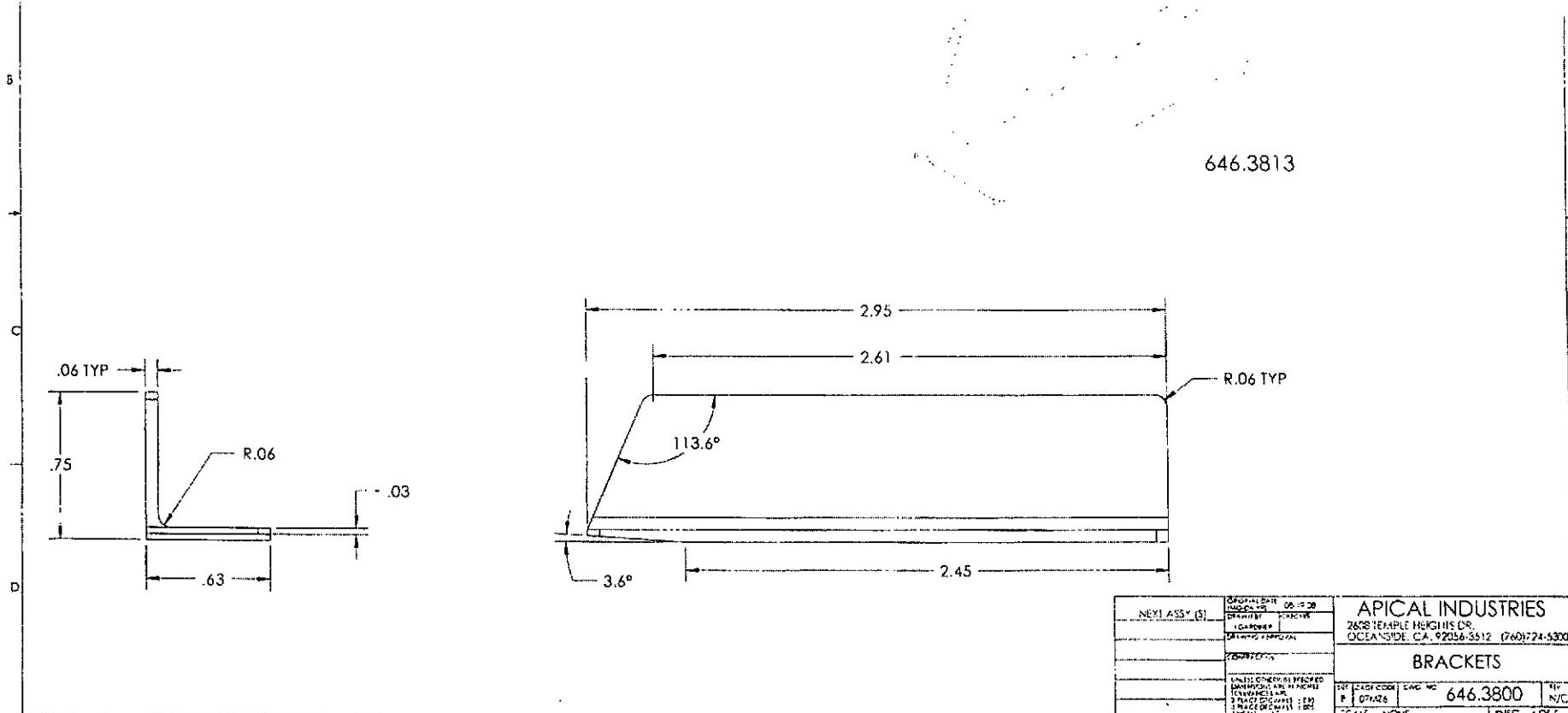




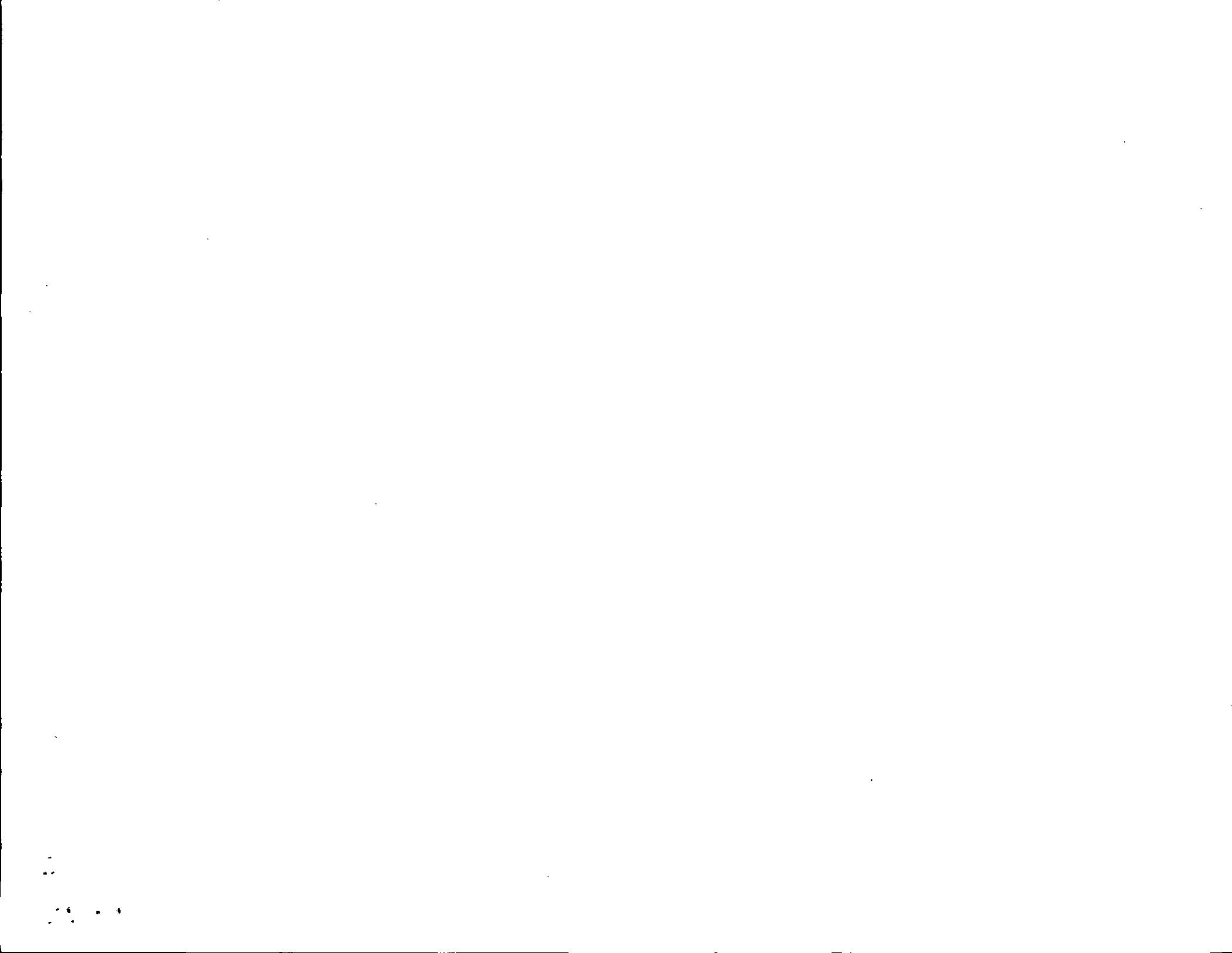
102345

2

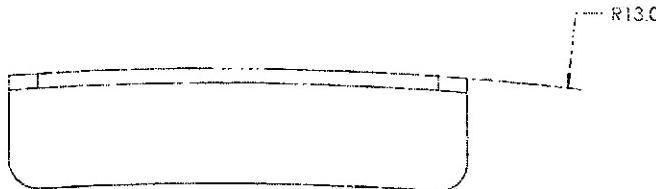
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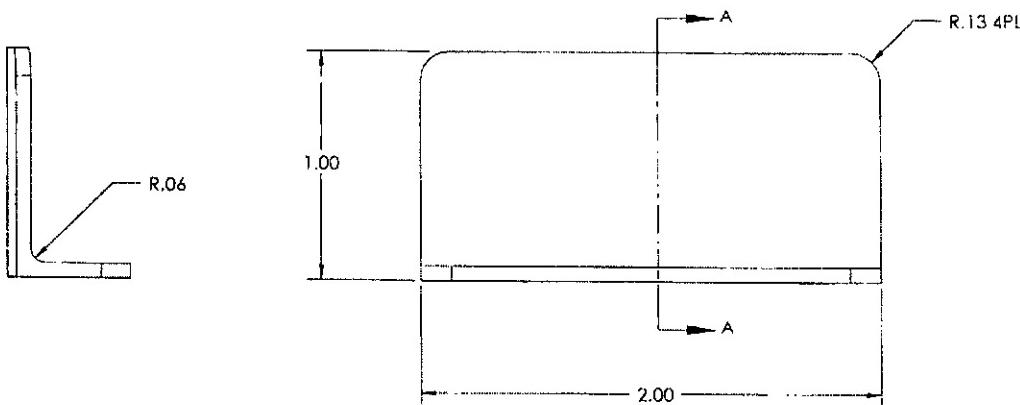
ITEM NO. 00-12-20	APICAL INDUSTRIES
DRAWN BY: KAREN	2608 TEMPLE HEIGHTS DR.
CHECKED BY: KAREN	OCEANSIDE CA 92056-3312 (760)724-5300
APPROVED BY:	
UNITS ORDERED: 1000000	BRACKETS
MANUFACTURED BY:	
STOCK NUMBER: 646.3800	646.3800
SCALE: N/C	N/C
DATE: 07/26	1 SHEET 4 OF 5



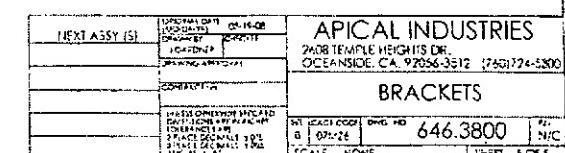
102345

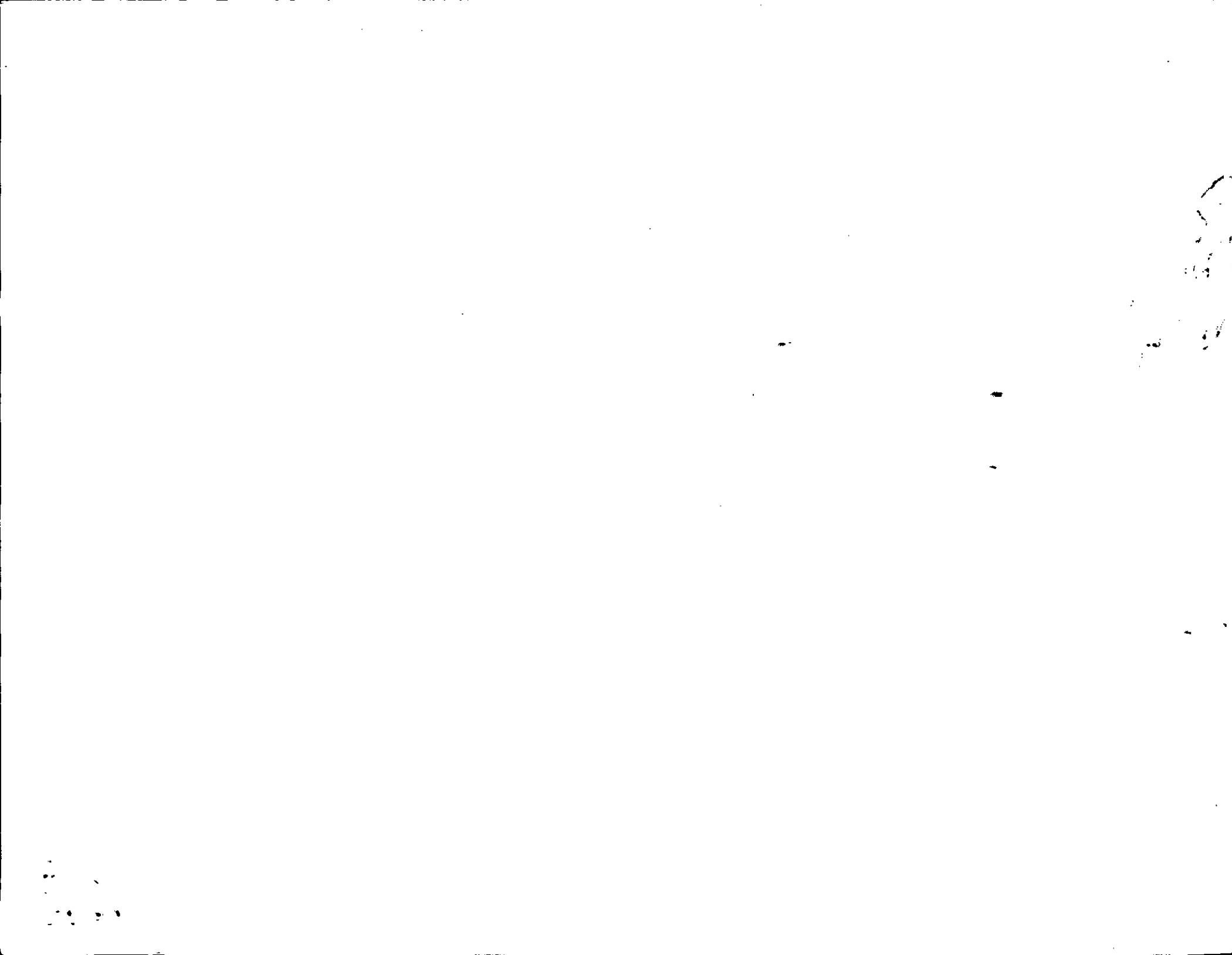


646.3814



SECTION A-A





DART AEROSPACE LTD	Work Order:	102345
Description: Gusset Bracket	Part Number:	646-3812
Inspection Dwg: 146-3800 Rev: N/S		Page 1 of 1

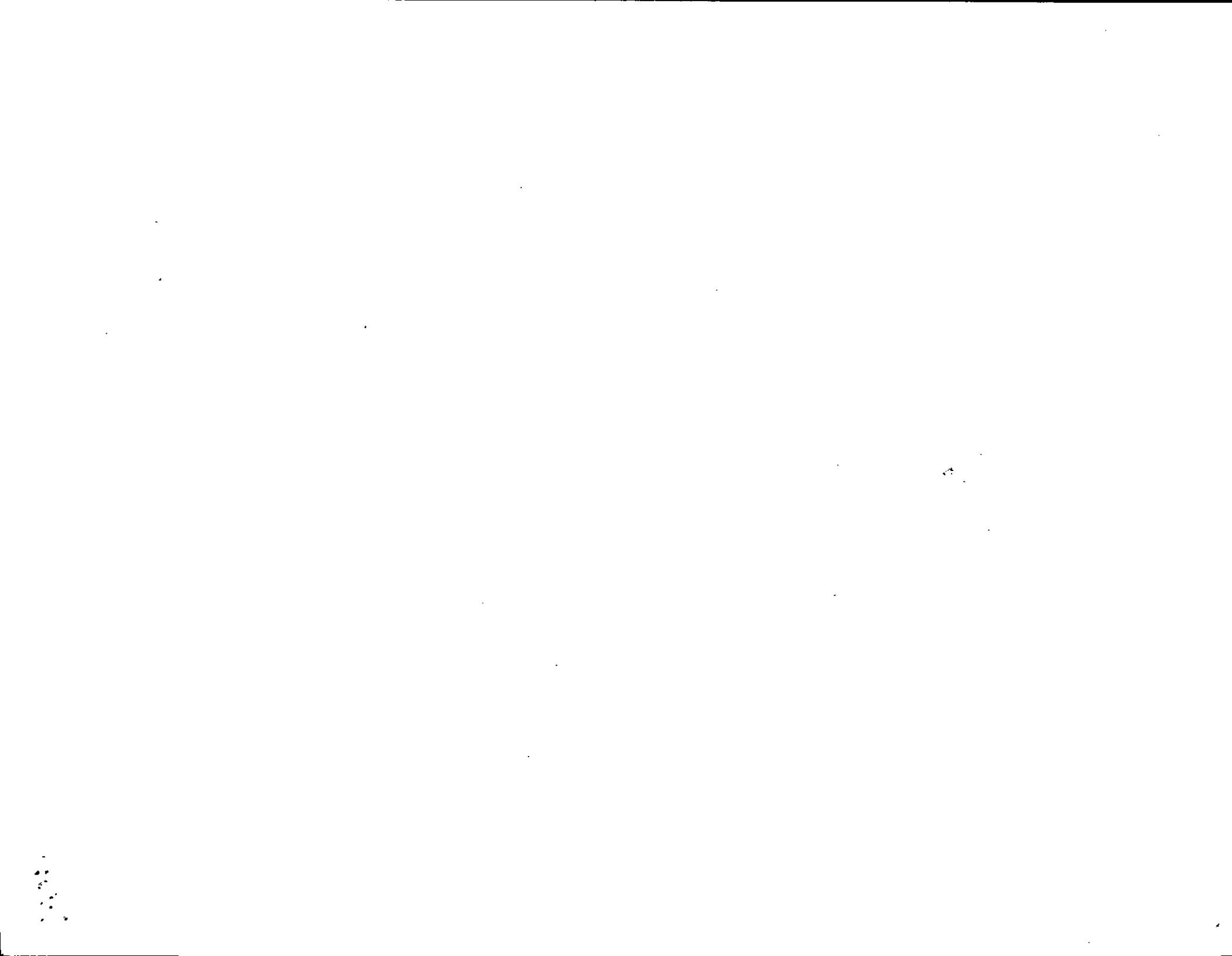
FIRST ARTICLE INSPECTION CHECKLIST

1

Measured by:	<i>JGP</i>	Audited by:	<i>44 9-89</i>	Preliminary Approval:	
Date:	<i>13/08/13</i>	Date:	<i>13/08/14</i>	Date:	

Rev	Date	Change	Revised by	Approved
E	10.04.14	Added preliminary approval	KJ	

10.04.15



Chantal Lavoie

From: Nigel Forbes
Sent: Wednesday, August 14, 2013 8:05 AM
To: Chantal Lavoie
Subject: ATG

Hi,

As discussed, all parts going to ATG do not require cleaning prior to the delivery. ATG will clean and prepare the parts prior processing.

Thanks1

Nigel





A.T.G. Industries Inc.
731, rue Industrielle Rd.
PLATING DEPARTMENT
Rockland, On K4K 1T2
Canada
Ph: (613) 446-4544
Fax: (613) 446-4556

Pack List

Number: 62596

Date: 30-Aug-13

To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ship To

DART AEROSPACE LTD
1270 ABERDEEN ST.
HAWKESBURY, ON K6A 1K7
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

Terms		Ship Via
Quantity	Description	Rev:
1 lot	Part: ASST 10 PCS 646.3012 4 PCS 646.3310 6 PCS 646.3312 20 PCS 646.3610 11 PCS 646.3812 → ✓✓/ 12 PCS 647.5710 23 PCS 646.9710 5 PCS 647.9711 14 PCS 646.9712 HARD ANODIZE BLACK MIL-A-8625 TYPE III CLASS 2 PRIME MIL-P-23377J TYPE I CLASS N Job: 20130542	PO: 20929
	Certificate of Conformance A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order. ISO 9001 : 2008 REGISTERED ATG SALES-2010 TERMS APPLY DATE: <u>30/8/13</u> CERTIFIED SIGNATURE: <u> m </u> RECEIVER SIGNATURE: _____	Line:

